

# Calgary Mobility Safety Programs and Initiatives

### Introduction

The City of Calgary has developed a wide repertoire of safety programs and initiatives through the course of the 2019-2023 Safer Mobility Plan (SMP) and prior. These are focused on engineering, education, encouragement, evaluation/innovation, and equity. We collaborate with our key partner, Calgary Police Service (CPS), and through the next 2024-2028 Safer Mobility Plan are laying the groundwork to build on the

current activities (outlined below).

- Safer Mobility Operations Team (SMOT): Bi-monthly meeting where City staff. CPS, and other partners discuss emerging issues and community safety concerns.
- Reconstruction Meetings: Quarterly meeting with the collision reconstruction team to review recent incidents and identify potential solutions for appropriate engineering related countermeasures.
- Community Speed Watch: a popular <u>program</u> where CPS officers and Mobility Safety staff join community volunteers at a location of concern. Volunteers can use a radar gun to measure vehicle speeds and communicate a message to drivers using a paddle ('Thank you" or 'Slow Please').

Other important areas of collaboration include *Emergency Response Coordination* where CPS and the Mobility Operations Centre work together in coordinating emergency response and incident clearance activities.

## Network Level and Spot Improvements

With the mandate to reduce the number of severe injuries and fatalities on Calgary's roadways, we ensure that our practices and strategies are data driven and evidence based. Our safety management process is outlined in the following sections.

**Network-wide Safety Performance and Prioritization Activities.** To achieve the highest possible collision reduction and obtain the maximum benefit from our limited resources, we undertake various network level safety studies to improve our understanding of the safety performance of our assets and the factors that influence them.

**Identification and Implementation of Safety Improvements.** We regularly conduct In-service Road Safety Reviews at high collision locations or internal Collision Reviews which are more limited in scope to understand site specific issues and identify most appropriate improvement

options. The findings have often been used by other project teams, implemented as part of the safety capital programs, or through other internal groups.

**Evaluation of Countermeasures.** As the knowledge base of the traffic safety field is continuously growing, safety performance of countermeasures is becoming better understood and we are using this information from other jurisdictions where possible. However, in many situations this information is not available or transferable, so we have been conducting evaluations to increase our knowledge base and aid in planning and predicting value of future investments.

- Walking and cycling improvements we implement changes at locations with pedestrian collision patterns and implement changes to reduce risk. The deployment of Leading Pedestrian intervals, left turn arrows, medians/centreline hardening, and other countermeasures has resulted in pedestrian collision reductions of 50-100%.
- Right turn improvements
   undertaken to prioritize our top right turn collision locations. The ongoing work has contributed to the reconstruction Calgary's highest right turn collision locations. We have reconstructed and evaluated these locations with 60-90% reduction of collisions for traffic using the right turns.
- Left turn across path improvements identifies and treats locations with left turn collision concerns typically resulting in installation of left turn arrows or other low-cost signal improvements. When appropriate, protected only left turn phasing can result in 85-95% collision reduction for left turn across path collisions.

#### Pilots and Innovation.

Evaluation and innovation are key components of traffic safety and enable evidence-based assessment of the effectiveness of strategies and help in finding new solutions to longstanding problems.

- Video-Based Conflict Analysis. We use newest technologies for the evaluation of highranking intersections and identification of most appropriate measures. We partnered with AVIVA and MicroTraffic to review our top 10 intersections and implemented changes at these locations.
- Left turn calming pilot (also called centerline hardening) is a temporary intersection
  treatment that reduces left turning vehicle speeds and improves pedestrian safety.
  Temporary rubber speed bumps and plastic posts are placed on the road centerline,
  which encourage drivers to make slower turns and pay more attention to their
  surroundings. We implemented left turn calming at three signalized intersections
  between Fall 2022 and Summer 2023. Since the treatments were installed,
  improvements in driver behavior were observed at all project locations. We are currently
  monitoring, collecting data on potential issues and treatment effectiveness.
- Updating guidelines and best practices. We collaborate on updating policies standardize best practices and develop city-wide programs for proven countermeasures. For example based on the success of the pilot of Leading Pedestrian Intervals we are updating the signal operation policies to expand its use, to safer outcomes for vulnerable road users.

## School and Community Improvements

As traffic safety is a topic that many citizens are very concerned and passionate about, we have developed several ongoing programs to engage, educate and encourage the public, including:





**In-Street Pedestrian Sign Initiative.** Following a successful pilot in 2020, a city-wide deployment of this successful low-cost countermeasure was initiated. It is expected to be completed for all with grades 6 and younger by mid-2024.

**Accessibility Improvements.** To improve accessibility for Calgarians, together with our internal partners we install missing sidewalks, wheelchair ramps, and remove maze gates and sidewalks across the city. We continue to evaluate new materials such as the trial of temporary tactile walking surface indicators(TWSI) at "smart right" channelized turns.

**Active and Safe Routes to School Program.** In partnership with our facilitator, Ever Active Schools, this program engages with school children and staff to ensure the local roadway network is safe and supportive of active travel. The <u>Active and Safe Routes to School</u> program is initiated at 10 schools per year.

**Speed Limit Reduction Program**. In 2021, the City of Calgary reduced the standard speed limit from an unposted 50 km/h to 40 km/h. Currently citizens continue to request speed reductions for other roadways posted at 50 km/h. The criteria originally developed for the residential speed reduction are being used to review these locations. Moreover, we have undertaken a pilot to better understand the impact of reducing posted speed at locations that are on the boundary of what is currently considered appropriate for reduction. In 2023, 77 streets have been requested for a speed limit reduction of which data collection and review was completed at 35 locations with 31 approved for reduction to 40 km/h.

**Mobility Safety Education Tool Kit.** We developed a new educational resource for elementary-aged children and families, the Mobility Safety Education Tool Kit. The kit currently includes a new webpage, the Calgary in motion! Activity Book, Conversation Guide and Crosswalk Safety Video. In 2024, we will work to further expand our programs through partnership with schools to target distribution of activity books to one grade level annually,

expand "Staying Safe on City Streets" video series, translate resources into additional languages, and develop resources for older students (high schools).

**Speed Hump Guidelines and Pilot.** Existing speed humps were installed through the process outlined in the 2003 Traffic Calming Policy which has now been replaced with the 2022 Neighbourhood Streets Policy. We are currently developing a new process for evaluation of citizen requests. Thus far we have begun an extensive literature review and consulted with several jurisdictions about their practices and policies. The pilot to install speed humps is being developed for 2024. We received 81 speed hump requests in 2023.

**Temporary Corridor Safety Improvements.** We work closely with communities to deliver quick-deployment changes with temporary materials and address safety concerns in the short-

term. This allows us to trial the changes and make any adjustments before the permanent measures are installed.

Public Safety Education and Awareness. We deliver quarterly public safety media campaigns including Distracted Driving and Back to School. The Report Impaired Driving program in partnership with MADD deploys educational signage twice per year (December and July). We also support our partners with various types of safety messaging.

**SLOWs Speed Trailer Rotation Program**. We deploy speed trailers at locations where citizens have brought concerns about speeding. The rotation is done in two week increments between May and November, weather permitting.



**Program**. Citizens who live in a residential area where kids are at play, and have concerns about speeding or traffic safety, can request an <u>educational sandwich board sign</u>.

